

is thus introduced into both auxiliary cells and divides near the points of entrance. One of these two nuclei passes to the top of each cell, from which region the favella is to develop. The original nucleus (gametophytic) of each auxiliary cell, together with one of the sporophytic nuclei, finally becomes cut off from the developing favella by a wall and takes no further part in the history of the cystocarp. If these observations are confirmed in other species of *Callithamnion* the fact will be regarded by the writer as one of the most valuable observations that has been published in this field of investigation; for *Callithamnion* has presented one of the most difficult problems offered to students of the red algæ. Moreover, the physiological conditions there present seem to be duplicated in a number of genera (*Spermothamnion*, *Griffithsia*, *Lejolisia*, etc.). A satisfactory explanation for *Callithamnion* offers the hope that we may finally understand the complicated organization in a number of other forms.

Time alone will determine how generally the theory of Oltmanns may be applied. The instances of detailed observations on the puzzling conditions of this remarkable group of plants are so few, in comparison to the mass of perplexing phenomena presented, that one may well hesitate before considering Oltmanns' views as established. But it appears to the writer that Oltmanns gives us the most reasonable theory yet presented *in extenso*, the most satisfactory working hypothesis for future investigation, and that its stimulus upon research in this group of algæ will be far reaching.—BRADLEY MOORE DAVIS, *The University of Chicago*.

A NEW SILPHIUM.

IN describing a new *Silphium* as *S. lanceolatum* in the February number of the *BOTANICAL GAZETTE* (p. 139) I unaccountably overlooked the fact that Nuttall had used the same specific name in the genus. I therefore propose the name of *Silphium Chickamaugense* for this species.—WM. M. CANBY, *Wilmington, Del.*